



Intel® Server Board S5500WB

Intel® Server System SR1690WB

Spares/Parts List and Configuration Guide

A reference guide to assist customers in ordering the necessary components to configure the Intel® Server Board S5500WB and the Intel® Server System SR1690WB.



Revision 1.7

Enterprise Platforms and Services Marketing

Revision History

July '09 - Rev 1.0 – initial public release of Intel® Server System SR1690WB, retained Intel® Server Board S5500WB product codes, including those for processor and management software.

July'09 – Rev 1.1 – Updated spares and accessories in support of PRA/SRA

Sept'09 – Rev1.2 – Updated MMID for SR1690WBNA and added accessory codes

Sept'09 – Rev1.3 – added VMware vSphere* software information

Nov'09 – Rev1.4 – Remove InfiniBand* IO module support from the list

Dec'09 – Rev1.5 – Add chassis cable management arm kit for AXXHERAIL2

Feb'10 – Rev1.6 – Update new order code and mm# for Server Board, Server System and slim-line DVD/CDR drive accessory

Apr'10 – Rev1.7 – Remove basic slide rail kit AXXBASICRAIL from the list

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Product Overview

Product Overview: The rack-optimized Intel® Server Board S5500WB and Intel® Server System SR1690WB are designed for high-density computing environments where energy efficiency and total cost of ownership are critical. They support up to two Intel® Xeon® processor 5500 series on next-generation Intel® microarchitecture, highly scalable DDR3 memory, and expandable PCIe 2.0 I/O.

Product Descriptions – Overview

The Intel® Server Board S5500WB is available to order in 3 different varieties:

1. **Intel® Server Board S5500WB - SSI (available in single pack or OEM 10PK).**

SSI SKU- this version of the server board is designed to work with an “off the shelf” multi-rail power supply that adheres to the SSI power specification: “Power Supply Design Guideline for 2008 Dual-Socket Servers and Workstations”. SSI specifications can be viewed at the following web site: <http://ssiforum.org>

2. **Intel® Server Board S5500WB - 12V(available in single pack or OEM 10PK).**

12V SKU – this version of the server board uses specially designed “single rail” power supplies that provide 12V and 5V standby current. The server board has integrated high efficiency voltage regulators that produce other voltages required (e.g. 3.3V, 5V). The board can also supply 5V power needed for hard drives. More details on this can be found in the Technical Product Specification (TPS).

3. **Intel® Server System SR1690WB* (An integrated system SKU).**

Integrated System – Ships as an integrated system** SKU including the SSI version of the Intel® Server Board S5500WB in a Server Chassis featuring a high efficiency 650-watt power supply, PCIe 2.0 Riser and 4 hot swap HDD carriers which support both 2.5” and 3.5” drives.

*Chassis will not be offered separately

**Customer is required to provide Processors, DDR3 main memory and hard drives separately to configure a complete, bootable system.

Note: In addition to this document, there is a web based tool to assist customers in selecting components for Intel Server Products available here: <http://www.intel.com/go/serverconfigurator>



Production Order Codes

1.1 Board & System Order Codes

Product Code	MM#	UPC	Description
BBS5500WB12VR	905464	00735858208376	Intel® Server Board S5500WB, 12V Power SKU, 10 pack.
S5500WB12VR	905465	00735858208369	Intel® Server Board S5500WB, 12V Power SKU, single pack/spare.
BBS5500WBR	905462	00735858208352	Intel® Server Board S5500WB, SSI power SKU, 10 pack.
S5500WBR	905463	00735858208345	Intel® Server Board S5500WB, SSI power SKU, single pack/spare.
SR1690WBR	907330	00735858210980	Intel® Server System SR1690WB including: <ul style="list-style-type: none"> • 1 Intel® Server Board S5500WB • Intel® Server Chassis SR1690WB • 4 hot swap HDD carriers (supports both 2.5" & 3.5") • 1 PCI Express 2.0 x8 riser • 1 high-efficient non-redundant 650-watt PSU • SATA backplane to connect 4 HDDs • 4 dual-rotor system fans • Cabled front panel • 2 Intel® Thermal Solution STS100P • Quick Reference Label • Quick Start Users Guide • Resource CD
SR1690WBRNA	905758	00735858210980	Same as SR1690WB but includes North America Power cord

Note that the boards are not shipped with a software CD, while the system does include a CD. The latest drivers and software can be downloaded from <http://support.intel.com> customers who require an Intel® Deployment Assistant CD may download an .ISO image and burn their own CDs.

1.2 Optional System Accessory Order Codes:

Product Code	MM#	UPC	Description
FSR1690PMKIT	903445	00735858210997	System maintenance kit accessory for SR1690WB (includes all cables, Front Panel/USB Board, spare air duct, etc)
FSR1690HDDCAR	903456	00735858211000	Spare HDD carrier for SR1690WB, supports both 2.5" and 3.5" HDD; MOQ is 5
FSR1690BP	903457	00735858211017	Spare hot swap HDD backplane for SR1690WB – single pack
FSR1690FAN	903458	00735858211024	Spare system fan kit for SR1690WB (includes one processor fan and one memory fan)
FSR1690PS	903735	00735858211031	Spare 650-watt PSU for SR1690WB with PM Bus
AXXBASICRAIL	881096	00735858184748	Basic slide rail kit. Does not support Cable Management Arm
AXXHERAIL2	901082	00735858206549	Full extending Rail Kit, compatible SR1690WB
AXXRACKARM2	901084	00735858206563	Chassis cable management kit, compliant with

			AXXHERAIL2
AXXSATADVROM	906872	00735858197663	Slim-line SATA DVD/CD-R drive accessory
AXXSATADVDRWROM	898051	00735858197670	Slim line SATA DVD-RW drive accessory

1.3 Optional Board Accessory Order Codes:

Product Code	MM#	UPC	Description
AXXRMM3	900961	735858206570	Intel Remote Management Module 3
AXX4SASMOD	900946	00735858206372	Intel® SAS Entry RAID I/O Expansion Module- provides four internal ports of pass through SAS, entry-level RAID 0/1/1E, and optional host RAID 5 – requires AXXRAKSW5
AXXROMBSASMR	901641	00735858208017	Intel® Integrated RAID I/O Expansion Module- provides 4 internal ports full featured SAS/SATA RAID 0, 1, 5, 6 and striping capability for spans 10, 50, 60. Note: optional backup battery module AXXRSBBU3 must be ordered separately.
AXXRSBBU3	900954	00735858181853	Intel® RAID Smart Battery for AXXROMBSASMR
AXXGBIOMOD	880518	00735858184779	Dual Gigabit Ethernet Intel® I/O Expansion Module
AXXSASIOMOD	880517	00735858184786	External 4 port SAS Intel® I/O Expansion Module
AXX10GBIOMOD	900962	735858206525	Dual port 10 Gigabit Ethernet Intel® I/O Expansion Module based on Intel 82598 controller with CX4 connectors
AXX4GBIOMOD2	901359	735858206532	Quad port Gigabit Ethernet Intel® I/O Expansion Module based on the Intel® 82576EB Gigabit Ethernet Controller
AXXRAKSW5	878958	00735858181860	Intel® RAID Activation Key AXXRAKSW5. Enables Intel® Embedded Server RAID Technology II, an optional driver-based RAID 5 capability to on-board SATA ports, or on AXX4SASMOD. MOQ = 5.
AXXPCIE16RISER	892597	00735858197441	1U PCI Express gen2 riser. Intel has performed basic validation with this riser and recommends customers do their own testing when using it with a 3rd party 1U chassis and the S5500WB server board.
AXXRJ45DB92	881944	735858155212	Serial cable adapter kit. Contains two serial cable converter dongles (RJ45 to DB9) one for DSD and one for DCD (Modem). The kit also includes one serial ribbon cable for cabling 2 nd serial port from the baseboard.

1.4 Intel® Thermal Solution STS100:



Boxed processors do not include CPU heatsinks, a separate heatsink is required.

Product Code	MM#	UPC	Description
BXSTS100P	900492	00735858205146	Intel® Thermal Solution STS100P – Passive 1U/2U heatsink for processors up to and including 95W TDP




1.5 Intel® Xeon® Processor 5500 Series options:


Processor Name	Boxed Product Code	Product MM#	Clock Speed	QPI Speed	L3 Cache	Max Memory Speed	# of Cores / Threads	HT	Turbo Boost	Power	UPC Code (Boxed Product Only)
Intel® Xeon® Processor X5570	BX80602X5570	901025	2.93 GHz	6.4 GT/s	8MB	1333 MHz	4 / 8	√	√	95W	7 35858 20569 6
Intel® Xeon® Processor X5560	BX80602X5560	901026	2.80 GHz	6.4 GT/s	8MB	1333 MHz	4 / 8	√	√	95W	7 35858 20570 2
Intel® Xeon® Processor X5550	BX80602X5550	901027	2.66 GHz	6.4 GT/s	8MB	1333 MHz	4 / 8	√	√	95W	7 35858 20571 9
Intel® Xeon® Processor E5540	BX80602E5540	901028	2.53 GHz	5.86 GT/s	8MB	1066 MHz	4 / 8	√	√	80W	7 35858 20572 6
Intel® Xeon® Processor E5530	BX80602E5530	901029	2.40 GHz	5.86 GT/s	8MB	1066 MHz	4 / 8	√	√	80W	7 35858 20573 3
Intel® Xeon® Processor E5520	BX80602E5520	901030	2.26 GHz	5.86 GT/s	8MB	1066 MHz	4 / 8	√	√	80W	7 35858 20574 0
Intel® Xeon® Processor L5530	BX80602L5530	903280	2.40 GHz	5.86 GT/s	8MB	1066 MHz	4 / 8	√	√	60W	7 35858 20996 0
Intel® Xeon® Processor L5520	BX80602L5520	901033	2.26 GHz	5.86 GT/s	8MB	1066 MHz	4 / 8	√	√	60W	7 35858 20575 7
Intel® Xeon® Processor L5518	AT80602002265AB	901505	2.13 GHz	5.86 GT/s	8MB	1066MHz	4 / 8	√	√	60W	N/A
Intel® Xeon® Processor L5508	AT80602002697AC	901549	2.00 GHz	5.86 GT/s	8MB	1066MHz	2 / 4	√	√	38W	N/A
Intel® Xeon® Processor E5506	BX80602E5506	901031	2.13 GHz	4.8 GT/s	4MB	800 MHz	4 / 4	N/A	N/A	80W	7 35858 20576 4
Intel® Xeon® Processor L5506	BX80602L5506	901023	2.13 GHz	4.8 GT/s	4MB	800 MHz	4 / 4	N/A	N/A	60W	7 35858 20579 5
Intel® Xeon® Processor E5504	BX80602E5504	901032	2.00 GHz	4.8 GT/s	4MB	800 MHz	4 / 4	N/A	N/A	80W	7 35858 20577 1
Intel® Xeon® Processor E5502	BX80602E5502	901022	1.86 GHz	4.8 GT/s	4MB	800 MHz	2 / 2	N/A	N/A	80W	7 35858 20578 8

1.6 Intel® Xeon® Processor 5600 Series options:

Processor Name	Clock Speed	QPI Speed	L3 Cache	# of Cores / Threads	Power
Intel® Xeon® Processor L5609	1.86 GHz	4.8 GT/s	12 MB	4	40
Intel® Xeon® Processor L5618	1.87 GHz	5.86 GT/s	12 MB	4	40
Intel® Xeon® Processor L5638	2 GHz	5.86 GT/s	12 MB	6	60
Intel® Xeon® Processor L5630	2.13 GHz	5.86 GT/s	12 MB	4	40
Intel® Xeon® Processor L5640	2.26 GHz	5.86 GT/s	12 MB	6	60
Intel® Xeon® Processor E5620	2.4 GHz	5.86 GT/s	12 MB	4	80
Intel® Xeon® Processor E5630	2.53 GHz	5.86 GT/s	12 MB	4	80
Intel® Xeon® Processor E5640	2.66 GHz	5.86 GT/s	12 MB	4	80
Intel® Xeon® Processor X5650	2.66 GHz	6.4 GT/s	12 MB	6	95
Intel® Xeon® Processor X5660	2.8 GHz	6.4 GT/s	12 MB	6	95
Intel® Xeon® Processor X5670	2.93 GHz	6.4 GT/s	12 MB	6	95
Intel® Xeon® Processor X5667	3.066 GHz	6.4 GT/s	12 MB	4	95

1.7 Intel® RAID Contollers Options:

Picture	Product Code	MM#	UPC	MOQ	Description
	SRCSASLS4I	896952	00735858 201353	5	Intel® RAID Controller SRCSASLS4I - PCIe x8, 4P SAS RAID Controller, 128MB embedded memory, MD2 Low Profile, half length form factor.
	SRCSASBB8I	896943	00735858 201346	5	Intel® RAID Controller SRCSASBB8I - PCIe x8, 8P SAS RAID Controller, 256MB embedded memory, MD2 Low Profile, half length form factor.
	SASUC8I	900176	00735858 205115	5	Intel® RAID Controller SASUC8I - PCIe x8, 8P SAS Controller with entry-level HW RAID 0/1/1E/10E, low profile, half-length MD2 compliant form factor.

	SASWT4I	900267	00735858 205108	5	Intel® RAID Controller SASWT4I - PCIe x4, 4P SAS Controller with entry-level HW RAID 0/1/1E/10E, low profile, half-length MD2 compliant form factor.
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1.8 Intel® System Management Software – Upgrade Order Codes:





The following Intel® System Management Software Upgrade SKUs are offered. Each SKU includes a Certificate of Authenticity (COA) that contains a product key for user to enter to upgrade:

Upgrades available to Microsoft* System Center Essentials 2007

- Small Network Edition - This upgrade gives the user the ability to manage up to 5 Windows-based servers OSEs and 15 Windows-based client OSEs.
- Standard Edition- This upgrade gives the user the ability to manage up to 10 Windows-based servers OSEs and 50 Windows-based client OSEs.
- Upgrade to add 1 or 5 Server Management license - This upgrade gives the user the ability to manage 1 or 5 additional Windows-based server OSE.
- Upgrade to add 5 or 20 Client Management licenses - This upgrade gives the user the ability to manage 5 or 20 additional Windows-based client OSEs.

Intel® System Management Software – Upgrade Order Codes:

Product Code	UPC	MM	Description	Picture	MOQ
SMS2SSE2SNE	7 35858 19670 3	893177	Upgrade from 90 day trial Edition to Small Network Edition Not included: Software CDs are not included with upgrade.		1
SMS2SNE2STD	7 35858 19671 0	893221	Upgrade from Small Network Edition to Standard Edition Not included: Software CDs are not included with upgrade.		1
SMS2SSE2STD	7 35858 19672 7	893170	Upgrade from 90 day trial Edition to Standard Edition Not included: Software CDs are not included with upgrade.		1

SMS2CAL1S	7 35858 19675 8	893217	Microsoft® System Center Essentials 2007 Server Management License (1 Pack) Not included: Software CDs are not included with upgrade.		1
SMS2CAL5S	7 35858 19676 5	893218	Microsoft® System Center Essentials 2007 Server Management License (5 Pack) Not included: Software CDs are not included with upgrade.		1
SMS2CAL5C	7 35858 19673 4	893220	Microsoft® System Center Essentials 2007 Client Management License (5 Pack) Not included: Software CDs are not included with upgrade.		1
SMS2CAL20C	7 35858 19674 1	893219	Microsoft® System Center Essentials 2007 Client Management License (20 Pack) Not included: Software CDs are not included with upgrade.		1

1.9 VMware vSphere* and vCenter* Server SKUs

The following VMware vSphere SKUs are offered when purchasing a qualifying Intel® Server Board or Intel® Server System. Each SKU contains a software product activation code for user to enter to download software and install. As directed on the certificate, the end user must register the product activation code with VMware at <http://www.vmware.com/code/intel> within 30 days to access VMware Software, Support and Subscription Services.

VMware vSphere* and vCenter* Server SKUs

- Essentials

This license activation code gives the user VMware vSphere* 4 Essentials Bundle for 3 hosts (Max 2 processors per host and 6 cores per processor), with 1 year VMware Subscription.

- Essentials Plus

This license activation code gives the user VMware vSphere* 4 Essentials Plus Bundle for 3 hosts (Max 2 processors per host and 6 cores per processor), with 1 year VMware Gold Support and Subscription.

- Standard

This license activation code gives the user VMware vSphere* 4 Standard for 1 Processor (Max 6 cores per CPU), with 1 year VMware Gold Support and Subscription.

- Advanced

This license activation code gives the user VMware vSphere* 4 Advanced for 1 Processor (Max 12 cores per CPU), with 1 year VMware Gold Support and Subscription.

- Enterprise Plus

This license activation code gives the user VMware vSphere* 4 Enterprise Plus for 1 Processor (Max 12 cores per CPU), with 1 year VMware Gold Support and Subscription.

- VMware vCenter* Server Standard for vSphere*

This license activation code gives the user VMware vCenter* Server 4 Standard for vSphere* (Includes Orchestrator and Linked Mode), with 1 year VMware Gold Support and Subscription.

VMware vSphere* and VMware vCenter* Standard – Order Codes:

Product Code	UPC	MM	Description	MOQ
VMW4ESS	7 35858 21272 4	904791	Software license activation code certificate for VMware vSphere* 4 Essentials Bundle for 3 hosts (Max 2 CPUs per host and 6 cores per CPU) with 1 year VMware Subscription.	1
VMW4ESSPLUS	7 35858 21273 1	904792	Software license activation code certificate for VMware vSphere* 4 Essentials Plus Bundle for 3 hosts (Max 2 CPUs per host and 6 cores per CPU) with 1 year VMware Gold Support and Subscription.	1
VMW4STD	7 35858 21274 8	904793	Software license activation code certificate for VMware vSphere* 4 Standard for 1 Processor (Max 6 cores per CPU) with 1 year VMware Gold Support and Subscription.	1
VMW4ADV	7 35858 21275 5	904797	Software license activation code certificate for VMware vSphere* 4 Advanced for 1 Processor (Max 12 cores per CPU) with 1 year VMware Gold Support and Subscription.	1
VMW4ENTPLUS	7 35858 21276 2	904800	Software license activation code certificate for VMware vSphere* 4 Enterprise Plus for 1 Processor (Max 12 cores per CPU) with 1 year VMware Gold Support and Subscription.	1
VMWVCSTD	7 35858 21277 9	904801	Software license activation code certificate for VMware vCenter* Server 4 Standard (includes Orchestrator and Linked Mode) with 1 year VMware Gold Support and Subscription.	1